Extension Service
West Virginia University.

Disaster and Emergency Management Resources

Safe Drinking Water

- After a disaster, it is possible that water supplies will be temporarily cut off or become contaminated. Because you must have water to survive, it is important to know how to locate and purify drinking water to make it safe. Water sources in the home include:

  - Melting ice cubes.
  - Using water from the hot-water tank. Turn off the power that heats it, and let the tank cool. Then place a container underneath and open the drain valve at the bottom of the tank. Don't turn the tank on again until water services are restored.
  - Using water in water pipes. Release air pressure into the plumbing system by turning on the highest faucet in the house. Then drain the water from the lowest faucet.

- Purifying potentially contaminated water by heat sterilization:

  - Boiling water is the preferred method of purification because disease-causing microorganisms cannot survive the intense heat.
  - Bring water to a rolling boil for 1 minute.
  - Pour the water back and forth from one clean container to another to improve the taste. Adding a pinch of salt could also help.

- Purifying potentially contaminated water by chemical sterilization:

  - In some situations, boiling may not be an option. The alternative is to treat the water chemically.
  - Plain household chlorine bleach may be used. Be sure the label states that hypochlorite is the only active ingredient. Bleach containing soap or fragrances is not acceptable.
  - With an eye dropper, add 8 drops of bleach per gallon of water (16 if the water is cloudy); stir and let stand.
  - After 30 minutes, the water should taste and smell of chlorine. At this time, it can be used. If the taste and smell (and appearance in the case of cloudy water) have not changed, add another dose and let stand. If after one-half hour the water does not have a chlorine smell, do not use it.

Adapted from resource material developed by the Federal Emergency Management Agency